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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KUMAR, PANKAJ

ART UNIT PAPER NUMBER

2631

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/345,755

Applicant(s)

SUGIURA, AKIHIKO

Examiner

Pankaj Kumar

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/2/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,8,10 and 12-16 is/are rejected.
- 7) ☒ Claim(s) 2,4,6,9 and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 5, 7, 8, 10, 12 and 13-16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Haeff et al. USPN 3,760,417.
4. As per claim 1, Haeff teaches a communication breaking device for interrupting communication of a communication apparatus which modulates or demodulates information being communicated with a predetermined code sequence, said communication breaking device comprising (preamble is not afforded patentable weight): code sequence extracting means which is capable of extracting the predetermined code sequence from a received incoming wave (Haeff fig. 1, 3: signal extracted into 49; it would be obvious to have the signal be a code sequence as explained below); code sequence inverting means which is capable of inverting the code sequence extracted by said code sequence extracting means into an inverted code sequence (Haeff fig. 3: 55); phase control means which is capable of advancing the phase of the extracted

Art Unit: 2631

code sequence or that of the inverted code sequence (Haeff paragraph 26: "These positive or negative pulses are applied to the grid of the vacuum tube in automatic delay control amplifier 42 where they are amplified, inverted in phase,"; fig. 2: 42); and breaking-wave transmitting means for transmitting the inverted code sequence having the advanced phase as a communication breaking wave so as to obtain a communication breaking space (Haeff figs. 1, 2, 3: output of 55 in fig. 3 and 42 in fig. 2 eventually go to 37 in figs 2 and 3 which go to 25, 24 and 23 in fig. 1). What Haeff does not teach is code sequence. It would have been obvious to one skilled in the art at the time of the invention to modify Haeff to make its analog signals into code sequence which would be digital. One would be motivated to do so since digital signals enable systems to have higher accuracy.

5. As per claim 3, teaches a communication breaking device according to claim 1, wherein said breaking-wave transmitting means comprises electric-power amplifying means which is capable of controlling an amplification gain (Haeff fig. 1: 16).

6. As per claim 5, teaches a communication breaking device according to claim 1, wherein said breaking-wave transmitting means intermittently transmits the communication breaking wave (Haeff figs 1, 5: transmission is intermittent since fig. 5 reception of signals is intermittent, fig. 1's transmission will be intermittent since transmission is based on reception.).

7. As per claim 7, teaches a communication breaking device according to claim 3, wherein said breaking-wave transmitting means intermittently transmits the communication breaking wave (Haeff figs 1, 5: transmission is intermittent since fig. 5 reception of signals is intermittent, fig. 1's transmission will be intermittent since transmission is based on reception.).

Art Unit: 2631

8. As per claim 8, teaches a communication breaking device according to claim 1, wherein the incoming waves are transmitted from a plurality of the communication apparatuses (Haeff teaches transmitting to a plurality of devices with the output of 24 going to two different elements. Haeff does not teach that this transmission to two different devices is from two different device. It would have been obvious to one skilled in the art at the time of the invention to modify Haeff to teach that the transmission is from a plurality of the communication apparatuses. One would be motivated to do so in order to be more efficient since if one device has to transmit to many different devices, it's load may be too much.).

9. As per claim 10, teaches a communication breaking device according to claim 3, wherein the incoming waves are transmitted from a plurality of the communication apparatuses (Haeff teaches transmitting to a plurality of devices with the output of 24 going to two different elements. Haeff does not teach that this transmission to two different devices is from two different device. It would have been obvious to one skilled in the art at the time of the invention to modify Haeff to teach that the transmission is from a plurality of the communication apparatuses. One would be motivated to do so in order to be more efficient since if one device has to transmit to many different devices, it's load may be too much.).

10. As per claim 12, teaches a communication breaking method adapted to a communication method which modulates or demodulates information about contents of communication with a predetermined code sequence, said communication breaking method comprising the step of: compensating the code sequence in an incoming wave by transmitting a communication breaking wave (discussed above).

Art Unit: 2631

11. As per claims 13 and 15, Haeff teaches claims 1 and 12 as discussed earlier. What Haeff does not teach is a portable telephone system. It would have been obvious to one skilled in the art at the time of the invention to modify Haeff to teach communication breaking or muting for a portable telephone system. One would be motivated to do so since Haeff already teaches radio pulses and portable telephone systems transmit and receive radio pulses.

12. As per claims 14 and 16, Haeff teaches claims 1 and 12 as discussed earlier. What Haeff does not teach is CDMA. It would have been obvious to one skilled in the art at the time of the invention to modify Haeff to teach CDMA. One would be motivated to do so for the advantages of using CDMA such as a greater number of users or stations being able to share a particular bandwidth.

Allowable Subject Matter

13. Claims 2, 4, 6, 9, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2631

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (703) 305-0194. The examiner can normally be reached on Mon, Tues, Wed and Thurs after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PK

TEMESGHEN GHEBRETTINSAE
PRIMARY EXAMINER